

ÜBERDEK™
EXTERIOR DECK TILING SYSTEM

UberdeK Exterior Deck Tiling System

Installation Manual

Contents:

Section 1DE & 1ST

Tiled Exterior Decks and Tiled Stairs



WWW.UBERTILE.COM

The information pertained within this guide is for reference only and does not supersede instructions from other product manufacturers or building codes.

Always consult and follow manufacturers specific installation and safety instructions BEFORE installing any products.

übertile™ bears no responsibility or liability for damage(s) resulting from the contents contained within this manual.

Information may change without notice. Visit www.ubertile.com for most current revision.

All tasks performed by the product user are at the own risk and liability of the user.



Section 1DE- Tiled Exterior Decks

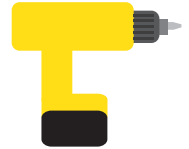
Tools & Materials to install überdek™:



überdek™ boards



überdek™
Screws



Power Drill



Marker / Pencil



Spirit Level



Tape Measure

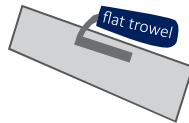


Cutting
Blade

Tools & Materials to fill überdek™:



Laticrete™ 3701



Flat Trowel

Tools & Materials to waterproof überdek™:



Laticrete™ Hydroban



Paint Roller

Materials to tile überdek™:



Laticrete™ 254
Platinum
Thinsit



Laticrete™
SpectraLock
Epoxy Grout



Laticrete™
Latasil
Silicone

Construction Overview:

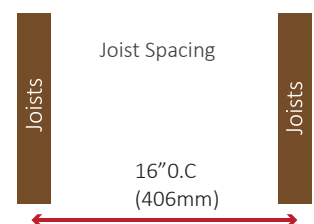
A successful exterior überdek™ tiled installation in a cold harsh climate like Canada is completely possible and reliable. The tile installer and specifier must be thorough, not overlooking any single installation detail as listed in this guide and by industry standards.

This is NOT an interior installation, thus interior installation practises are not relevant. For this reason, read this manual carefully, understanding each requirement and its purpose.

Each installation detail in this guide has a significant & very important purpose, the necessity for these details are amplified by an extreme and harsh exterior environment. Ignoring these details will void your warranty, and potentially degrade a very reliable system.

Subfloor & Structure Requirements:

- überdek™ can NOT be installed on top of sheetings. If there are existing sheeting (plywood, OSB or other) the sheeting must be removed, exposing the Joists so the überdek™ can be fastened directly to the Joists.
- Slope the Joist system minimum 6 mm per 305 mm (¼" per foot) for water drainage. Failure to abide by this requirement will result in a tiled surface which can not shed water as designed, permanently damaging the tile installation during frost thaw cycles. Warranty is VOIDED on all installations with slope less than 6 mm per 305 mm (¼" per foot)
- Joist spacing must NOT exceed 16" on center.
- Joists must be supported/fastened to the main supporting sections with Joist hangers.
- Joists must be exterior grade, pressure treated wood Joists, a minimum 2x8 size with the exact size of the deck Joists defined by an engineer to be suitable for the application of tile with the intended work loads.
- For Joist spans longer than 8' (2438mm) cross bracing is needed between Joists to prevent Joist racking.
- Maximum variation in the Joist system is ¼" in 10'-0" and 1/16" in 1'-0" from the required plane.
- The deck structure and deck support structures including posts or pilings, must be approved by an engineer to be suitable for the application of tile within the intended work loads.
- The ends of überdek™ must be fully supported. Cantilevering is NOT permitted.
- Maximum allowable substrate deflection under live load not to exceed L/540.
- Follow local building codes and requirements for deck construction.
- Installation must comply with TCNA Detail F105-19 Structural Ribbed Self-Supporting Boards.
- If using überdek™ on stair treads, see separate stair specifications located within this manual.
- Using this product above living space / occupied space requires the use of a specific code approved roofing membrane, installed by a roofing contractor, to roofing codes, which is intended to allow the installation of tile. Laticrete Hydroban is NOT a roofing membrane. Contact ubertile for more information.
- überdek™ is NOT for use in a vertical application.
- When concentrated loads (scissor lifts, hot tubs, etc) will be used, the engineer shall specify a substrate to accommodate the concentrated loads.



Tile Requirements:

- The tile used must be a porcelain tile with less than 0.5% absorption, meeting ANSI A137.1:2019.
- The tile must be rated for exterior application in your specific climate by the manufacturer of the tile.
- A tile with a suitable coefficient of friction for exterior use is strongly recommended.
- A minimum tile size of 12"x12" and no larger than 24"X24" can be used.

Installation Temperatures and Finishing Detail requirements:

- Use only überdeK™ fasteners. They have a special head design to properly secure the überdeK™ boards.
- Ambient temperature MUST be above +5°C (41°F) for board installation.
- Refer to mortar manufacturer minimum temperature installation requirements for corresponding products.
- Ensure appropriate waterproofing/flashing/drip edges/gutters are used against all vertical/horizontal terminations / perimeters / intersections to ensure water management, allowing water to properly evacuate the deck, without going under or into the substrates.
- Think of a "tiled deck" rather as a "tiled roof" thus basic roofing flashing/drip edge, etc principles will ensure correct water management. Ignoring this step will likely cause water penetration into the substructure and eventual damage.

Posts, Railing requirements:

- Never drill or penetrate the deck surface.
- Railings or posts must be fastened onto the fascia of deck and NOT on top of deck or tiled surface (ie fascia mount railings).

Movement Joints requirements:

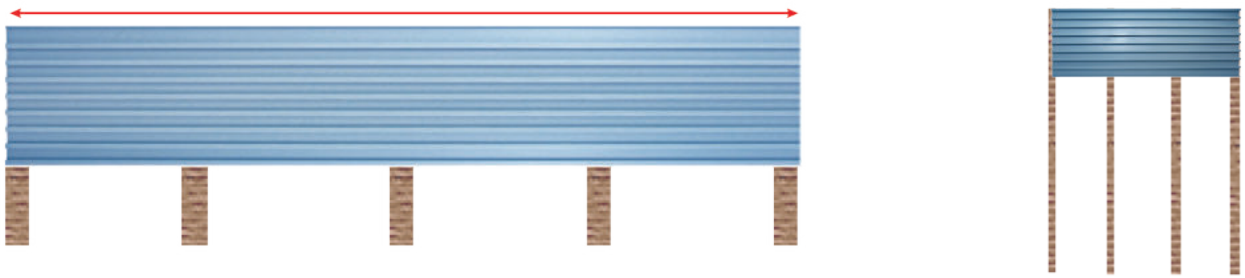
- Movement joints must be incorporated and installed into the finished tile assembly as recognized by the TTMAC 09300 Tile Installation Manual (every 2439 mm (8') to 3659 mm (12') and around the perimeter of the installation where the horizontal plane intersects vertical) to accommodate movements attributable to changes in moisture, temperature, and loading.
- Do not make cuts for movement joints through the überdeK™ boards.

Laticrete® Products:

- This product has been tested using the specified Laticrete® products, thus only the specified Laticrete® mortars, grouts, membranes and sealants are approved for use with the überdeK™ System.
- Refer to each Laticrete® specific product data sheets for full use details, curing, etc.
- Refer to Laticrete® Short Form Installation Specification and Detail ES F103 available on www.ubertile.com

Installation Fundamentals:

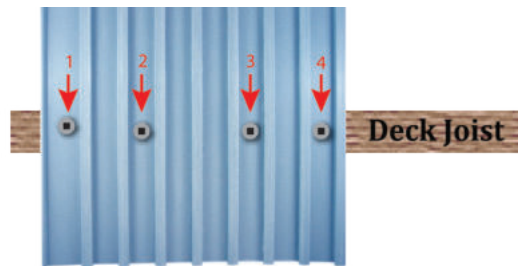
überdeK™ panels are installed Perpendicular to the deck joists.



The boards must be placed onto the joists with the ribbed side facing UP



Using überdeK™ screws, place 4 screws per board onto each joist, as shown below.



The überdeK™ panels are joined together via their tongue & groove profiles at the edges of the boards.

Use a rubber mallet to lock the boards together completely.



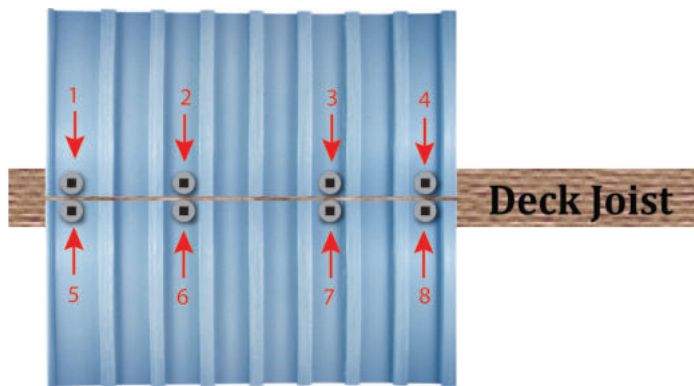
Installation Fundamentals continued:

When joining or butting boards together lengthwise, always join or butt the edges over a joist.

Each joining must share equal parts of a joist.

Each side should receive 4 screws, totalling 8 screws. Do not maintain a continuous seam along the same joist, always stagger the seams.

A board should always be fixed to a minimum 3 joists.



To cut überdeK™ boards, use a tile wet saw or circular saw equipped with a masonry blade.

If cutting boards parallel to the ribs, the cut should be done as close to a rib as possible.



Follow the saw manufacturer's recommendations for safety precautions when cutting.

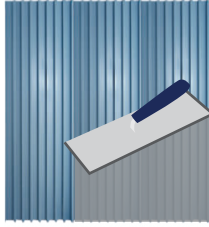
Always wear all required safety equipment.

Filling überdeK™ voids:

Using Laticrete® 3701 Fortified Mortar Bed, completely fill the voids between the ribs of the überdeK™ boards. Do this by screeding the mortar flush with the top of the ribs.

Having the correct mortar consistency is critical to easier application of the 3701.

Follow Laticrete® recommendations for mixing, application, consistency and curing.

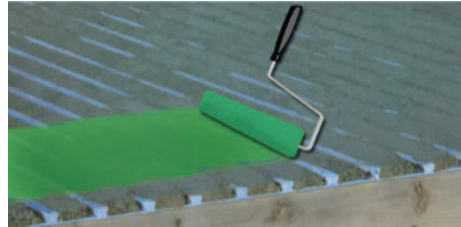
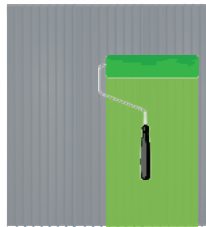


Waterproof coating:

Once Mortar Bed has cured, apply 2 coats of Waterproof Membrane, Laticrete® Hydroban®. Install one coat, let it cure before applying the second coat.

Each coat should be applied (rolled) perpendicular to itself, at the correct application thickness.

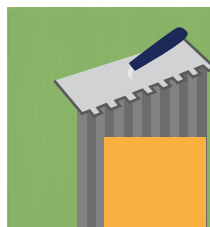
Follow Laticrete® recommendations for mixing, application and curing.



Installing Tile:

Use Laticrete® Platinum 254® thinset to bond tiles obtaining 100% thinset coverage below the tiles.

Follow Laticrete® recommendations for mixing, application and curing.



Grouting:

Use Laticrete® SpectraLockProPremium® epoxy grout to completely fill the grout joints.

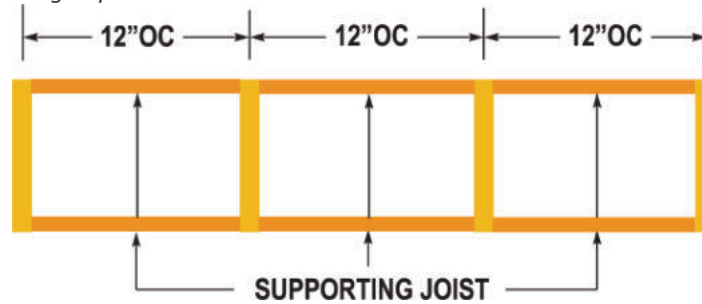
Follow Laticrete® recommendations for mixing, application and curing.



Construction requirements:

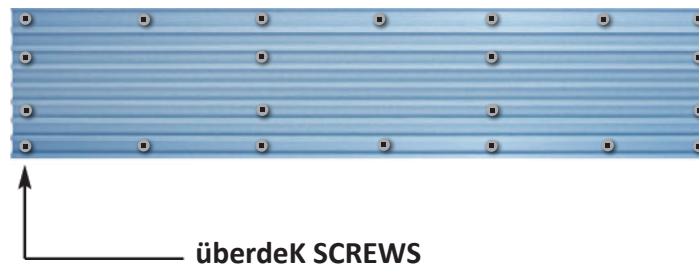
- When installing überdeK™ on stairs, specific framing must be provided per below details.

fig 1. Stair Tread topview framing requirement



- überdeK is rated for horizontal application (TREAD) use only.
- überdeK can NOT be used as a backing or bonding surface for vertical application (RISER). An alternative appropriate bonding surface must be used when tiling the stair risers.
- The supporting joist structure can be no more than 12" on center.
- All deck or stair Joists must be pressure treated wood
- Additional bracing using a minimum of 2x6 joist is required at the front and rear of the stair joists as illustrated (fig 1) to properly support the tread.
- Additional fasteners (screws) are used as specified in the illustration (fig 2)

fig 2. Screw placement topview



- When cutting the boards parallel to the ribs, the cut must be placed at the BACK of the stair tread. The cut must be made as close to the ribs as possible.
- 1 continuous board must be used on the tread. If the tread length exceeds 12' length, the seam must be placed on a double joist, so BOTH joining boards receive a full joist.
- The tile or board can not be allowed to extend beyond the edge of the support structure.
- These instructions are superseded by all local building codes for stair construction.